

sequence described in SEQ ID NO: 4, or by DNA that hybridizes with the DNA described in SEQ ID NO: 3 or SEQ ID NO: 4.

Claim 8 (amended):

DNA encoding [the] a protein selected from the group consisting of [any one of claims 1 to 5];

(a) a protein derived from a mammal whose expression level in the suprachiasmatic nucleus (SCN) fluctuates with a circadian period; and

(b) a protein involved in the formation of circadian rhythm in the suprachiasmatic nucleus (SCN) comprising an amino acid sequence described in SEQ ID NO: 1 or an amino acid sequence described in SEQ ID NO: 2, or said sequence in which one or more amino acids are substituted, deleted, or added.

Claim 9 (amended):

DNA [having the] comprising a sequence described in SEQ ID NO: 3 or a sequence described in SEQ ID NO: 4, or DNA that hybridizes with the DNA [having the] comprising a sequence described in SEQ ID NO: 3 or SEQ ID NO: 4, wherein the DNA encodes a protein involved in the formation of circadian rhythm in the suprachiasmatic nucleus (SCN).

Claim 11 (amended):

A vector [carrying] comprising the DNA of [any one of claims 8 to 10] claim 8.

Claim 12 (amended):

A transformant expressibly retaining the DNA of [any one of claims 8 to 10] claim 8.

Claim 13 (amended):

A method for producing [the] a protein [of any one of claims 1 to 7,] selected from the group consisting of:

(a) a protein derived from a mammal whose expression level in the suprachiasmatic nucleus (SCN) fluctuates with a circadian period; and

(b) a protein involved in the formation of circadian rhythm in the suprachiasmatic nucleus (SCN);

[the] said method comprising culturing the transformant of claim 12.

Please cancel claims 5, 7 and 10, without prejudice.

Please add the following new claims 14-16:

1 14. A vector comprising the DNA of claim 9.

1 15. A transformant expressibly retaining the DNA of claim 9.

1 16. A method for producing a protein involved in the formation of circadian rhythm
2 in the suprachiasmatic nucleus (SCN), said method comprising culturing the transformant
3 of claim 15.

The Commissioner is hereby authorized to charge any fees under 37 CFR 1.16 or 1.17 as required by this paper to Deposit Account 19-0065.

Respectfully submitted,



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